

MATERIAL SAFETY DATA SHEET

AZ92A MAGNESIUM WELDING ROD

VERSION DATE 1/5/98

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SECTION 1

PRODUCT IDENTIFICATION

COMPANY NAME WHO SENT MSDS HARRIS WELCO. DIV. OF J.W. HARRIS CO., INC.
COMPANY ADDRESS 1051 YORK RD
KINGS MOUNTAIN, NC 28086
EMERGENCY PHONE NUMBER (800)-424-9300
MSDS VERSION NUMBER 2
TRADE NAME

HAZARD RATING (HMIS) NA

HMIS DESIGNATED KEY NA

SECTION 2

HAZARDOUS COMPONENTS

MATERIAL	% BY WEIGHT	CAS NUMBER	ACGIH TLV (Mg/M3)	SEC 313
ALUMINUM	9.00%	7429-90-5	NA	YES
ZINC	2.00%	7440-66-6	NA	YES
MANGANESE, MIN.	0.15%	7439-96-5	NA	YES
MAGNESIUM	BAL.	7439-95-4	NA	NA

SECTION 3

PHYSICAL PROPERTIES

BOILING POINT NOT DETERMINED
MELTING POINT APPROXIMATELY 830F, 443C
VAPOR PRESSURE NA
VAPOR DENSITY (AIR=1) NA
SOLUBILITY IN WATER NA
SPECIFIC GRAVITY APPROX. 1.82
EVAPORATION RATE NA
APPEARANCE AND ODOR SILVER SOLID. NO ODOR

SECTION 4

FIRE AND EXPLOSION DATA

FLASH POINT NONE
EXTINGUISHING MEDIA SMOOTHER BURNING MAGNESIUM BY COVERING WITH AN
EXTINGUISHING POWDER APPROVED FOR USE ON MAGNESIUM FIRES
SUCH AS G1, MET-L-X, ETC. CONSULT NATIONAL FIRE PROTECTION
ASSOC. FOR OTHER INFORMATION.
SPECIAL PROCEDURES FIRE & EXPLOSION HAZARDS-WHEN HEATED IN AIR TO TEMP NEAR ITS
MELTING POINT, MAGNESIUM ALLOYS IGNITE AND BURN WITH WHITE
FLAME. WATER ON BURNING Mg. WILL PRODUCE HYDROGEN GAS AND
MAY CAUSE EXPLOSION.
UNUSUAL HAZARDS FIRE-FIGHTING EQUIPMENT SHOULD INCLUDE WEARING POSITIVE
PRESSURE SELF-CONTAINED BREATHING APPARATUS.

SECTION 5

REACTIVITY DATA

STABILITY STABLE
CONDITIONS TO AVOID ACID, WATER. REACTS WITH ACID TO FORM HYDROGEN GAS. IN
FINELY DIVIDED FORM, WILL REACT WITH WATER OR ACIDS TO
RELEASE HYDROGEN.
HAZARDOUS POLYMERIZATION WILL NOT OCCUR.
INCOMPATIBILITY SEE ABOVE.
HAZARDOUS DECOMPOSITION PRODUCTS NONE UNDER NORMAL USE OR STORAGE. SEE INCOMPATIBILITY
STATEMENT AND FIRE AND EXPLOSION HAZARD DATA, SECTION 3, FOR
SPECIAL SITUATIONS.

SECTION 6

HEALTH HAZARD DATA

ROUTES OF ENTRY EYE, SKIN CONTACT, SKIN ABSORPTION, INGESTION, INHALATION,
SYSTEMIC & OTHER EFFECTS
HEALTH HAZARDS EYE-MECHANICAL. SKIN CONTACT-MECHANICAL SKIN ABSORPTION-
UNLIKELY. INGESTION-UNLIKELY. INGESTION OF LARGE AMOUNTS OF
DUST COULD CAUSE SERIOUS INJURY, EVEN DEATH, BECAUSE ACUTE
ORAL TOXICITY OF MAGNESIUM IS MODERATE. INHALATION-DUST
IRRITATION TO RESPIRATORY TRACT. SYSTEMIC & OTHER EFFECTS-
EXPOSURES INCIDENTAL TO INDUSTRIAL HANDLING ARE NOT
ANTICIPATED TO CAUSE ADVERSE EFFECTS. REPEATED EXCESSIVE
EXPOSURE TO FUMES OR DUST OF A NUMBER OF METALS, INCLUDING
ALUMINUM, MAY CAUSE CENTRAL NERVOUS SYSTEM AND
DEVELOPMENTAL EFFECTS.
CARCINOGENICITY CARCINOGENICITY: NA
SIGNS & SYMPTOMS OF EXPOSURE SEE ABOVE
MEDICAL CONDITIONS FROM EXPOSURE SEE ABOVE
EMERGENCY & FIRST AID EYES-IRRIGATE IMMEDIATELY WITH WATER FOR AT LEAST 5 MINUTES.
SKIN-WASH OFF DUST IN FLOWING WATER OR SHOWER. INGESTION-
INDUCE VOMITING IF LARGE AMOUNTS OF DUST ARE INGESTED.

CONSULT PHYSICIAN. INHALATION-REMOVE TO FRESH AIR IF DUST INHALATION, CALL PHYSICIAN. NOTE TO PHYSICIAN: NO SPECIFIC ANTIDOTE FOR DUST INHALATION.
NONE

ADDITIONAL INFORMATION

SECTION 7

PRECAUTIONS FOR SAFE HANDLING AND USE

SPILL AND LEAK PROCEDURES CLEAN OFF AND USE.
WASTE AND DISPOSAL METHOD DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
HANDLING AND STORING PRECAUTIONS EXPOSURE GUIDELINE: MAGNESIUM-NONE ESTABLISHED FOR METAL. FOR OXIDE FUME OSHA PEL IS 10 MG/M3. ALUMINUM-FOR METALS ACGIH TLV 10 MG/M3 AND OSHA PEL 15 MG/M3 TOTAL, 5 MG/M3 RESPIRABLE. FOR FUMES, ACGIH TLV AND OSHA PEL ARE 5 MG/M3. FOR SALTS AND ALKYL; ACGIH TLV AND OSHA PEL ARE 2 MG/M3 ZINC-NONE ESTABLISHED FOR METAL. ZINC OXIDE-FOR DUST, OSHA PEL 10 MG/M3 TOTAL, 5 MG/M3 RESPIRABLE AND ACGIH TLV IS 10 MG/M3 STEL.
OTHER PRECAUTIONS NA

SECTION 8

CONTROL MEASURES

RESPIRATORY MEASURES INDUSTRY ATMOSPHERES, USE AN APPROVED DUST RESPIRATOR
VENTILATION GOOD GENERAL VENTILATION SHOULD BE SUFFICIENT FOR MOST CONDITIONS. LOCAL EXHAUST VENTILATION MAY BE NECESSARY FOR SOME OPERATIONS.
PROTECTIVE GLOVES AS APPROPRIATE
EYE PROTECTION USE SAFETY GLASSES. IF DUST EXPOSURE CAUSES EYE DISCOMFORT, USE CHEMICAL GOGGLES
OTHER PROTECTIVE EQUIPMENT WEAR CLEAN, LONG SLEEVED, BODY-COVERING CLOTHING.
WORK/HYGIENIC PRACTICES FOR MAXIMUM SAFETY: BE CERTIFIED FOR, AND WEAR A RESPIRATOR AT ALL TIMES WHEN WELDING OR BRAZING.

SECTION 9

DISCLAIMER

THIS DATA IS BELIEVED TO BE ACCURATE. HARRIS WELCO MAKES NO WARRANTY TO AND DISCLAIMS ALL LIABILITY FROM RELIANCE.

SECTION 10

ADDITIONAL INFORMATION

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING. IF OPERATIONS INVOLVING THIS PRODUCT, SUCH AS MACHINING, PRODUCE FINES, SUCH AS DUST, POWDER, CHIPS, OR TURNINGS, PROPER MEASURE SHOULD BE TAKEN TO PREVENT DUST CLOUDS AROUND THESE OPERATIONS. THESE FINES SHOULD BE COLLECTED FREQUENTLY AND STORED AND DISPOSED OF IN ACCORDANCE WITH NATIONAL FIRE PROTECTION AGENCY GUIDELINES. IF THESE FINES SHOULD BECOME IGNITED, THEY CAN BE EXTINGUISHED USING PROCEDURES DESCRIBED IN SECTION 3. PRACTICE REASONABLE CARE IN HANDLING MAGNESIUM ALLOY PRODUCT FORMS TO AVOID PRODUCT DAMAGE OR PERSONAL INJURY. STORE PRODUCT IN DRY LOCATION. WET, MOIST OR HIGH HUMIDITY STORAGE MAY LEAD TO CORROSION OF THE PRODUCT. STORE AWAY FROM OTHER COMBUSTIBLE MATERIALS. SEE NATIONAL FIRE PROTECTION ASSOC. BULLETINS NFPA 651, "MANUFACTURE OF ALUMINUM AND MAGNESIUM POWDER" FOR MORE DETAILED INFORMATION. SARA HAZARD INFO: UNDER EPA "HAZARD CATEGORIES" UNDER SECTION 311 AND 312 OF THE SUPERFUND AMENDMENT AND REAUTHORIZATION ACT OF 1986 (SARA TITLE III), THIS PRODUCT IS CONSIDERED, UNDER APPLICABLE DEFINITION NOT TO HAVE MET ANY HAZARD CATEGORY.
NA - NOT AVAILABLE